

CLAIM AMENDMENTS:

1. (currently amended) A sealing plug for a watertight connector, the sealing plug being formed with at least one wire insertion hole through which a wire is to be inserted, and being at least partly insertable into a cavity of a connector housing to provide a watertight sealing between an inner wall of the cavity and the wire, the cavity having a selected inside diameter and the wire having a selected outside diameter, wherein:

at least one outer lip is formed on an outer surface of the sealing plug for contact with the inner wall of the cavity and at least one inner lip is formed on an inner surface of the sealing plug for contact with the wire, the inner and outer lips having substantial identical sizes and shapes when viewed along a cross-section taken centrally through the wire insertion hole before the seal is mounted on the wire and in the cavity, the outer lip being longer along a longitudinal direction of the wire than having an outside diameter and the inner lip having an inside diameter, the outside diameter of the outer lip and the inside diameter of the inner lip being selected relative to the inside cross-sectional dimension of the cavity and the outside diameter of the wire so that a degree of deformation of the outer lip is larger than a degree of deformation of the inner lip for achieving a frictional resistance between the inner wall of the cavity and the sealing plug that is larger than a frictional resistance between the wire and the sealing plug, and so that the frictional resistance between the wire and the sealing plug is set to permit a movement of the wire relative to the sealing plug when the wire is caused to move.

Claims 2 and 3 (canceled).

4. (currently amended) The sealing plug of claim 31, wherein there are more of the outer lips than the inner lips so that a total frictional resistance between the inner wall of the cavity and the outer lips exceeds a total frictional resistance between the wire and the inner lips.

5. (previously presented) The sealing plug of claim 1, wherein the outer lips and the inner lips are substantially aligned.

6. (previously presented) A sealing plug for a watertight connector, the sealing plug being formed with at least one wire insertion hole through which a wire is to be inserted, and being at least partly insertable into a cavity of a connector housing to provide a watertight sealing between an inner wall of the cavity and the wire, wherein:

a fine embossed pattern being formed on at least part of a contact surface of the sealing plug with the inner surface of the cavity so that a frictional resistance between the inner wall of the cavity and the sealing plug is larger than a frictional resistance between the wire and the sealing plug, and

the frictional resistance between the wire and the sealing plug is set to permit a movement of the wire relative to the sealing plug when the wire is caused to move.

7. (previously presented) A sealing plug for a watertight connector, the sealing plug being formed with at least one wire insertion hole through which a wire is to be inserted, and being at least partly insertable into a cavity of a connector housing to provide a watertight sealing between an inner wall of the cavity and the wire, wherein:

a frictional resistance between the inner wall of the cavity and the sealing plug is larger than a frictional resistance between the wire and the sealing plug, and

the frictional resistance between the wire and the sealing plug is set to permit a movement of the wire relative to the sealing plug when the wire is caused to move,

wherein an outer contact surface of the sealing plug with the cavity is made of a material having a higher specific frictional resistance than an inner contact surface of the sealing plug with the wire.

Claims 8-10 (canceled).

11. (new) A watertight connector assembly comprising:

a housing having at least one cavity extending therethrough, the cavity having a selected inside diameter;

a wire having a selected outside diameter that is less than the inside diameter of the cavity, at least a portion of the wire being in the cavity; and

a sealing plug having an outer surface with at least one outer lip defining a selected outside diameter greater than the inside diameter of the cavity before the sealing plug is mounted in the cavity, the sealing plug further having a wire insertion hole extending therethrough and formed with at least one inner lip defining an inside diameter that is less than the outside diameter of the wire before the wire is mounted in the wire insertion hole, the inner and outer lips having substantially similar shapes and substantially identical sizes when viewed along a cross-section taken centrally through the insertion hole and before mounting the seal to the housing and the wire, the wire being passed through the wire insertion hole of the sealing plug and the sealing plug being inserted into the cavity so that the sealing plug is sealed to both the wire and the cavity, a difference between the outside diameter of the outer lips and the inside diameter of the cavity being greater than a difference between the inside diameter of the inner lip and the outside

diameter of the wire so that the outer lips deform more than the inner lips when the plug is inserted in the cavity and so that a lower frictional resistance is created between the inner lips and the wire than between the outer lips and the cavity.

12. (new) The connector assembly of claim 11, wherein the plurality of outer lips is substantially equal in number to the plurality of inner lips.

13. (new) The connector assembly of claim 12, wherein the inner lips are substantially aligned opposite from the outer lips.

14. (new) The connector assembly of claim 11, wherein a projecting distance of each outer lip on the outer surface of the sealing plug is substantially equal to a projecting distance of each inner lip from the inner surface of the sealing plug.